

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Revision of the Commission's Rules)	CC Docket No. 94-102
to Ensure Compatibility with Enhanced)	
E911 Emergency Calling Systems)	

To: Wireless Telecommunications Bureau

**Request for Waiver of Implementation of Wireless E911 Phase II
Automatic Location Identification**

Highland Cellular, Inc. ("HCI"), pursuant to Section 1.3 and 1.925 of the Federal Communications Commission's ("FCC") rules, and the *Fourth Memorandum Opinion and Order*¹, hereby requests a limited waiver of the E911 Phase II implementation requirements in Section 20.18(e), (f), and (h) of the FCC's rules for the reasons stated herein.

In its E911 implementation report of January 2001, HCI revealed its intent to deploy a network-based ALI solution by the fourth quarter of 2001. This solution was chosen over a handset-based solution due to the handset-based solution's lack of availability, and its cost. HCI has two RSA markets. It uses Nortel TDMA network equipment for its switch, which serves both of its markets. A handset-based solution has not been developed for TDMA handsets. Manufacturers, such as Nokia, have indicated that they will not develop handset solutions in the future for TDMA. Under the FCC's rules, carriers choosing to implement a network-based solution, like HCI, must provide

Phase II location services to 50% of its coverage area or population within 6 months of a valid request from a PSAP or by October 1, 2001, whichever is later; and to 100% of the coverage area or population within 18 months of such a request or by October 1, 2002, whichever is later. No fully compliant network-based solutions are available at this time for a TDMA-based carrier. In addition, HCI cannot overlay its network with an alternative air interface protocol such as GSM or CDMA. The FCC has acknowledged that waivers may be appropriate "where technology-related issues or exceptional circumstances" make it impossible for a carrier to implement E911 solutions by the FCC's deadline.²

HCI's Deployment Efforts

HCI has worked diligently with its vendors and PSAPs to become E911 compliant. HCI has a service agreement with TeleCommunications Systems (TCS) for the provision of Phase I and Phase II services. HCI will rely on Nortel and TCS for the primary nodes, including the Mobile Positioning Center (MPC) and Position Determination Equipment (PDE), needed to deliver Phase II location data. HCI's switch is currently MTX09, but must be updated to MTX10 to have the capability of transmitting Phase II data to PSAPs. MTX10 will not have that capability until Nortel makes its combined MPC/PDE available. Nortel has tentatively set this availability for the second quarter of 2000. This availability is subject to factors such as testing, coordination, and implementation. PDE technologies, which determine geographical position, are designed to use a number of cell sites for locating a caller. They are

¹ *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Fourth Memorandum Opinion and Order, 15 FCC Rcd 17442, 17457 (2000) (E911 Fourth Memorandum Opinion and Order).

² *Id.* at ¶ 43.

therefore more accurate in urban settings, where cell sites are more numerous and thus triangulation more accessible, than in rural areas. HCI's coverage area is rural and mountainous, and therefore has the low cell site density which manufacturers indicate will make the accuracy requirements of Section 20.18(h) difficult and time consuming to achieve in HCI's rural markets.

Request for Waiver

Vendors have indicated that no Phase II network-based solution is available at this time that would provide the sort of accuracy required by the FCC. In addition, Nortel will not have its MPC/PDE available until the second quarter of 2002. In light of the exceptional circumstances and technology-related issues involved here that make it impossible for HCI to comply with the FCC's Phase II network-based implementation deadlines, HCI seeks a waiver allowing it to provide a network-based solution to 50% of the requesting PSAP's coverage area or population within 6 months of a request and to 100% of the coverage area or population within 18 months of a request to best comply with Section 20.18(f) and (h). Further, HCI may need additional waivers of implementation deadlines should vendors be unable to provide the solutions necessary to enable HCI to meet the requested and any future extension deadlines.

Respectfully submitted,
Highland Cellular, Inc.

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